PATENT CLAIMS:

1. Device for extraction and taking of samples of an aqueous solution in a substratum; comprising a probe of a pyrometric capsule of porous porcelain having an end of lesser diameter than another end to which is attached a pipe of inert material, and a rubber cap with drilled holes hermetically sealing the pipe, an adapter pipe being fitted into one of the holes and being connectable to a vacuum pump, and a suction capillary that is placable inside the probe being fitted into another of the holes.

2. Use of the device according to Claim 1, for agricultural, environmental and industrial applications.

3. Use according to Claim 2, wherein the agricultural applications comprise studies of the composition of different chemical forms, evolution and degradation of organic compounds (chelates) and inorganic compounds in their different chemical forms. Also, to discover the evolution and availability of fertilizing nutrients in general, over the whole soil profile.

4. Use according to Claim 2, whereas the environmental applications comprise control polluting effluents such as nitrates, nitrites, fitosanitary compounds in general, chemical evolution of inorganic compounds, organic compounds (chelates, remains of pesticides), and the control of aquifers.

5. Use according to Claim 2, wherein the industrial applications include pond control with decanting of at least one of solids and liquids, and residue control.